

Suggested updated approaches to patient management

Rohit K. Katial, MD*; Eli O. Meltzer, MD†; Phil Lieberman, MD‡; Paul H. Ratner, MD§; William E. Berger, MD||; Michael A. Kaliner, MD¶; Charles J. Siegel, MD#; Don A. Bukstein, MD**; Carman A. Ciervo, DO††; and Bradley Marple, MD‡‡

INTRODUCTION

A symposium organized by National Jewish Health and held in Denver, Colorado, on October 8, 2009, investigated the role of intranasal antihistamines for allergic rhinitis. It was titled Rethinking the Treatment of Allergic Rhinitis; the Role of Intranasal Antihistamines: “Me Too Drugs” or a Novel Class? Articles 1 through 4 in this supplement provide detailed information about the biology of histamine and the efficacy and cost-effectiveness of intranasal antihistamines in allergic rhinitis. This publication, based on that symposium, provides a summary of new recommendations and proposes an updated approach to the treatment of allergic rhinitis.

UPATED TREATMENT ALGORITHM

On the basis of the discussion of the panel and the review of current guidelines, the following overarching themes for treatment of allergic rhinitis, regardless of severity and duration, were expressed:

1. All patients need to be educated on their disease, the goals of therapy, the appropriate method of medication administration (how to dose appropriately), and how to institute appropriate environmental controls.
2. All patients are appropriate candidates for intranasal saline either given as needed or for regular adjunctive use.
3. Intranasal decongestants can be used for brief courses of up to 3 days or unilaterally as a single dose.
4. Intranasal anticholinergics can be used across all patients with profuse rhinorrhea.

The specific recommendations for the treatment of allergic rhinitis from this consensus panel are shown in [Figure 1](#). These recommendations are based largely on the 2008 Allergic Rhinitis and its Impact on Asthma recommendations and the 2008 US Joint Task Force Practice Parameter recommendations, together with literature on intranasal antihistamines and other allergic rhinitis treatments as discussed in this publication.¹⁻⁴ However, the 2 former guideline publications

Affiliations: * Division of Allergy and Immunology, National Jewish Health, Denver, Colorado; † Allergy and Asthma Medical Group and Research Center, San Diego, California; ‡ Departments of Medicine and Pediatrics, University of Tennessee College of Medicine, Memphis, Tennessee; § Sylvana Research Associates, San Antonio, Texas; || Southern California Research, Mission Viejo, California; ¶ Institute for Asthma and Allergy, Chevy Chase and Wheaton, Maryland, and George Washington University School of Medicine, Washington, DC; # University of Missouri, Kansas City and Gladstone, Missouri; ** Respiratory Institute, Dean Medical Center, University of Wisconsin, Madison, Wisconsin; †† Department of Family Medicine, University of Medicine and Dentistry of New Jersey—School of Osteopathic Medicine, Stratford, New Jersey; ‡‡ Department of Otolaryngology, University of Texas Southwestern Medical Center, Dallas, Texas.

Disclosures: Dr Katial has served on the speakers’ bureau for GlaxoSmithKline and Teva; on advisory boards for Alcon, GlaxoSmithKline, Meda, and Teva; and has received research support from Novartis, MedImmune, GlaxoSmithKline, and Aerovance. Dr. Lieberman serves as a consultant for Meda and Alcon and as speaker for Meda. Dr. Meltzer serves as a consultant to Abbott, Alcon, Amgen, AstraZeneca, Boehringer Ingelheim, Capnia, Genentech, GlaxoSmithKline, Greer, Ista, Johnson & Johnson, MAP Pharmaceuticals, Meda, Merck, Novartis, Sanofi-Aventis, Schering-Plough, Sepracor, Teva, and Wyeth; serves as a speaker to AstraZeneca, Alcon, AstraZeneca, Genentech, GlaxoSmithKline, Meda, Merck, Sanofi-Aventis, Schering-Plough, and Sepracor; and receives grant/research support from Alcon, Amgen, Alexza, Astellas, AstraZeneca, Boehringer Ingelheim, Capnia, Genentech, GlaxoSmithKline, MAP Pharmaceuticals, Meda, Merck, Novartis, Sanofi-

Aventis, Schering-Plough, Sepracor, and Teva. Dr Ratner has served as a consultant to Meda, Alcon and Sepracor Pharmaceuticals. Dr. Berger has served as a consultant, speaker, and/or on an advisory board for Alco, AstraZeneca, Sanofi-Aventis, Novartis, Meda, Sepracor, GSK, Schering Plough, Genentech, Altana, Dey, Verus, Apieron, Map, and Teva. Dr. Kaliner has served as a consultant or on an advisory board for Alcon, GlaxoSmithKline, Greer, Novartis/Genentech, Sanofi-Aventis, Merck-Schering, Sepracor, Teva; has served on a speakers bureau for Alcon, Novartis/Genentech, Sepracor, and Teva; and has received research grants from all asthma and allergy companies. Dr. Siegel has served as a speaker for Merck, Teva, Meda, AstraZeneca, and Sanofi-Aventis; and has served as a consultant for Meda. Dr. Bukstein has served as a speaker/consultant/advisor for Merck, Genentech, Novartis Pharmaceuticals, Schering-Plough, 3M Pharmaceuticals, Abbott Laboratories, Sanofi-Aventis, Astra-Zeneca, Critical Therapeutics, Aerocrine, Teva, and King Pharmaceuticals; has received research support from Merck, Astra-Zeneca, Sanofi-Aventis, and Merck; and has commercial interests with HealthyAirways LLC, Strategic Pharmaceutical Advisors, and the PBL Institute.

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do not provide an approach with preferred and alternate treatment strategies. In addition, the role of intranasal antihistamines was not stressed in these guidelines. The consensus group participating in this symposia critically reviewed the data reflected in this supplement and proposed the algorithm depicted in [Figure 1](#).

One of the main differences from earlier guidelines is a preference-based strategy and a broader role for intranasal medications over oral medications. As discussed more fully in the preceding articles in this supplement, there are a number of intrinsic advantages of intranasal antihistamines over other oral or injectable treatment modalities, including the following⁵:

- Higher local concentration to maximize efficacy
- Administer medication directly to the affected site of the disease
- Onset of action within 15 to 30 minutes
- Low blood levels, leading to fewer systemic adverse effects
- Effects on mast cell stabilization, interleukins, cytokines, neural mechanisms, and cellular migration, all of which play a role in both allergic and nonallergic rhinitis

In addition, intranasal antihistamines have been shown in randomized, placebo-controlled trials to be more efficacious than oral antihistamines in the treatment of allergic

rhinitis,⁶ as described in detail in article 4 of this series. That article also discusses data from a pilot study of azelastine nasal spray vs fluticasone nasal spray vs cetirizine oral capsules (Meda Pharmaceuticals Inc, Somerset, New Jersey, data on file) and from a larger study of olopatadine vs fluticasone,⁷ both of which showed that intranasal antihistamine and intranasal corticosteroid are similar in effectiveness.

Leukotriene antagonists were included in the algorithm because they are approved for treatment of allergic rhinitis, but the purpose of this panel was not to critically review all the data surrounding this particular class of drugs. In general, leukotriene antagonists have been shown to be better than placebo for allergic rhinitis but have marginal efficacy.⁸

If both oral and ocular symptoms coexist with allergic rhinitis, then oral formulations would be preferred because they have systemic distribution. However, [Figure 1](#) reflects treatment of intranasal symptoms.

SUGGESTED FUTURE RESEARCH

The panel developed recommendations to help advance our understanding of the best treatment options for allergic rhinitis:

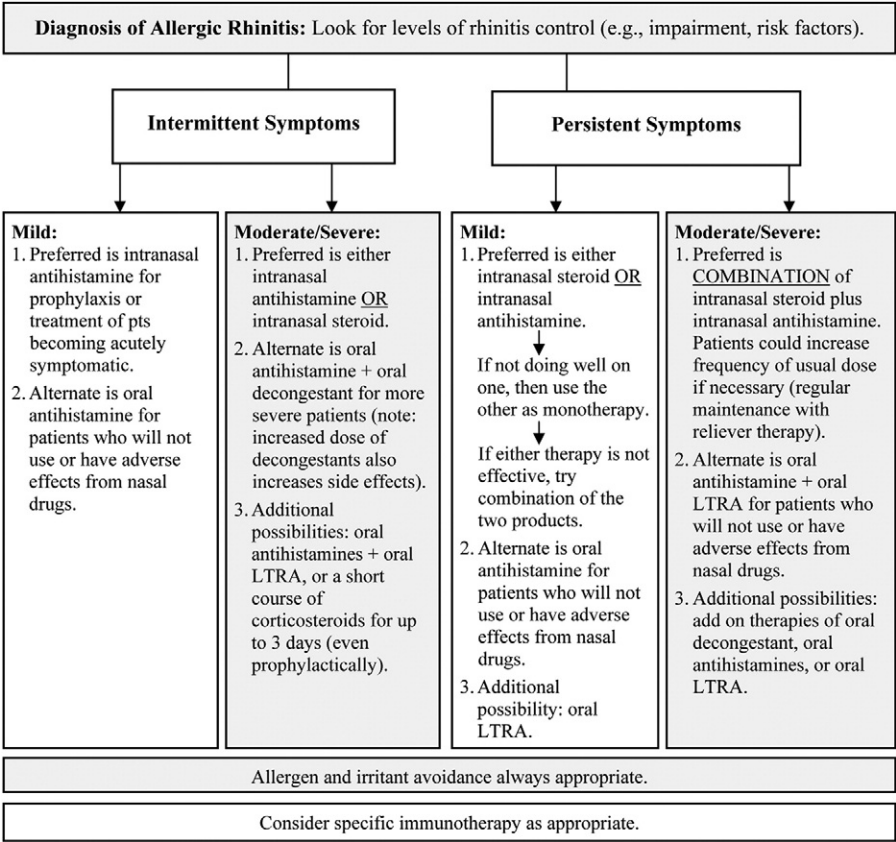


Figure 1. Consensus panel recommendations for the treatment of allergic rhinitis. LTRA indicates leukotriene antagonist.

- Additional research comparing intranasal antihistamines with intranasal corticosteroids at the doses used in the United States is imperative to determine the comparative efficacy of these 2 classes of drugs.
- Long-term safety and tolerability studies on the use of intranasal products for allergic rhinitis are necessary. Most studies have been performed for short-term treatment periods.
- Objective measures of patient improvement in allergic rhinitis need to be identified.
- Additional research is needed on the total burden of disease. This will require assessing indirect costs, quality-of-life impairment, and comorbidities and acquiring data on the effect of therapy on these important outcomes.
- Skills and methods must be developed so clinicians can assist patients in making appropriate decisions, including patient education and clear understanding of who is overseeing administration of medications to the patient.

Effective allergic rhinitis management requires the development of a physician-patient-family partnership, avoidance of environmental triggers, and appropriate pharmacologic and immunologic therapeutic interventions. Education is the key to promote adherence and optimize treatment outcomes. In addition, the treatment of allergic rhinitis combines environmental control (allergen and irritant avoidance), pharmacotherapy, and immunotherapy; surgery may be used adjunctively in a few specific patients.⁹ The selection of the specific pharmacotherapy for the patient depends on multiple factors, including the type of rhinitis (eg, allergic, nonallergic, mixed, episodic), most prominent symptoms, symptom severity, and patient age. The management and monitoring of allergic rhinitis should be individualized using both step-up and step-down approaches based on the history of the spectrum, severity, and duration of symptoms; physical examination findings; comorbidities; age of the patient; and patient preferences.

This panel was charged with reviewing the place of intranasal antihistamines in the spectrum of treatment for allergic rhinitis. Intranasal antihistamines have been shown in numerous randomized, placebo-controlled trials to be more efficacious than oral antihistamines.^{6,10-12} Although intranasal corticosteroids are considered by some to be superior to intranasal antihistamines, multiple studies have shown an equal effect of the 2 classes of medication. Both intranasal corticosteroids and intranasal antihistamines have been shown to reduce all symptoms of allergic rhinitis as reviewed

in the article by Kaliner et al in this supplement. In addition, intranasal antihistamines have a more rapid onset of action than intranasal corticosteroids. The future of allergy treatment will likely involve a combination of the 2 types of intranasal medications because research has shown they have additive efficacy.

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